

REMARKS/ARGUMENTS

To overcome the Examiner's objections, the claims have been formally amended to provide proper antecedent language for all positively recited features. Furthermore, to make it clear that the location of applicants' annular deflection slide 18 is not merely at a lower level than the annular flange but **beneath** this flange, the word "below" has been change to --beneath-- in claim 1.

Rejection of the claims under 35 U.S.C. 102(b) as being anticipated by cited JP '619A is respectfully traversed. This reference constitutes substantially the state of the art, as described in the long paragraph bridging pages 1 and 2 of the specification, and which the claimed invention is designed to improve.

In JP '619A, as in DE 2 228 215 A, an annular cooling chamber with a heat exchanger 8 is disposed the annealing base. This cooling chamber is connected to a pressure side of a radial blower by an annular flow conduit 7, between blade wheel 4 and guide apparatus 5. An axially displaceable slide 10 is arranged in the flow conduit and can be moved into the

pressure-side flow path of the radial blower to guide the gas stream coming from the protective hood 3 over the cooling chamber. The latter is in flow connection with the protective hood through an outer annular gap 9 between the guide apparatus of the radial blower and the protective hood. When the slide is lowered, the flow conduit is closed so that the axially moving protective gas is circulated by the blade wheel of the radial blower through the guide apparatus in the protective hood. To cool the protective gas, the slide is lifted, which causes the protective gas to be deflected downwardly into the cooling chamber. Since the annealing base must have a perforated bottom, the axial arrangement of the flow conduit disadvantageously affects the carrying capacity of the annealing base. In addition, the deflection of the protective gas into the cooling chamber produces unfavorable flow conditions because the slide must be arranged where the protective gas has the highest output velocity from the blade wheel. Thus, the apparatus of JP '619 has all the disadvantages the present invention overcomes. Thus, the reference cannot suggest to a person of ordinary skill in the art to improve a hood-type annealing furnace by the simple means set forth in the "wherein" clause of claim 1 as to obtain a favorable protective gas cooling without disadvantageously affecting the construction of the annealing base.

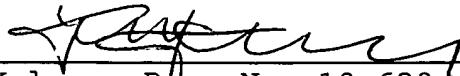
Applicants obtain this result by disposing heat exchanger 11 beneath annular flange 9, providing the flow conduit as an annular conduit 14 starting from an outer circumference of guide apparatus 5 and being concentric to annular gap 12, and an annular deflection slide 18 which encloses the guide apparatus on the outside. Nothing like this is suggested by the reference.

In contrast to JP '619's flow conduit 7, annular conduit 14 starts from an outer circumference of the guide apparatus and not from its inner circumference. Therefore, deflection slide 18 encloses the guide apparatus 5, i.e. the annealing base, while slide 10 of JP '619 is arranged in annular gap 7 within the annealing base. Because of the arrangement of annular conduit 14 and slide 18 associated therewith on the outside of the guide apparatus, heat exchanger 11 must be disposed beneath annular flange 9 of protective hood 8.

In view of the above, it is respectfully submitted that the claimed subject matter is neither anticipated by, nor obvious from, the reference.

A sincere effort having been made to overcome all grounds of objection and rejection, favorable reconsideration and allowance of claims 1-3 are respectfully solicited.

Respectfully submitted,  
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